

REMARKS

In his Advisory Office Action, the claims continue to be rejected as set forth in the Final Rejection mailed November 1, 2005. These remarks are directed to the Examiner's Advisory Action and in supplement to the prior response, which will be entered in connection with the RCE, and which was mailed on January 13, 2006.

As the final Office Action notes, Hughes is directed to a system on a chip; and in the prose description, Hughes suggests that in the specific instance of a hard disk drive controller, this system must run at normal speed. In connection with Roediger, there is disclosed a system for inserting instrumentation code blocks into a program which then collect profile data during execution of the program. And during execution of the program by the processor, if an instrumentation code block is encountered by the program, a dedicated profiler control bit is tested. In one instance, then, the instrumentation code is executed while in the other instance, it is not. Thus, each time the instrumentation code is encountered in Roediger, the instrumentation code control bit is checked.

First, considering the issue of "overhead", applicants' previous paper clearly indicates that overhead is added, as it must be, to the processor in order to effect the software analysis process. In a present-day controller, this is not an issue since the small overhead addition does not take away from running the disk drive process at its "normal" speed. There is no suggestion that it would not. In fact, it should be run at normal speed in order to be able to reproduce problems, which occur at "normal" speed.

However, the process suggested by Hughes for a system on a chip merely suggests adding the embedded trace macrocell (ETM), a process very different than Roediger's profiler. Hughes simply connects the ETM to the processor output to observe processor activity without interrupting or interfering with the execution of the software by the processor or affecting processor performance. This is clearly different from the Roediger process which requires the processor to look at a separate control bit in order to determine whether or not the Roediger profiler code block should be executed, thus modifying the executed code.

Accordingly, the two references are not compatible, do not suggest that one can be used in connection with the other, and fail to enable a compatible system, which meets the terms of the claims.

Further, Claim 1 requires "without halting execution of the computer executable program code, enabling execution of the set of computer executable program instructions", the latter relating to instructions for recording analytical data for at least a subset of the computer executable program code. This is not found in either of the references and accordingly should not be argued as being obvious from the references since in each instance of Hughes and Roediger, as detailed in the applicants' prior paper, the cited references do not incorporate this step.

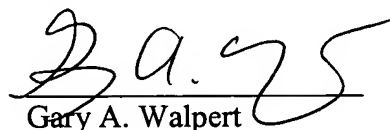
Further, the Examiner has not responded to Applicants' arguments with regard to the remaining claims and the requirement that there be either apparatus or methods for identifying an instruction in the executable program code that disables the set of computer executable program instructions from executing and causing a change to the program executable code to counter that effect. The prior reply after final rejection specifies much more specifically this argument beginning at section 2, on page 4.

For all of these reasons, it is respectfully submitted that the claims in the case should be passed to issue in due course.

No fees are believed to be due in connection with this reply. However, the Director is hereby authorized to charge any payments that may be due to Wilmer Cutler Pickering Hale and Dorr LLP Deposit Account No. 08-0219.

Respectfully submitted,

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Date: May 1, 2006

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